CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A apparatus, comprising:

an external cavity laser having an external cavity and a laser source within the external cavity;

a hermetically sealable container enclosing said external cavity laser in an inert atmosphere; [[and]]

an activated carbon drain positioned within said hermetically sealable container to absorb outgassing compounds[[.]]; and

a heat source thermally coupled to at least one of said laser source and said external cavity to maintain said at least one of said laser source and said external cavity at a first temperature above a second temperature of said activated carbon drain when said laser source is not powered to prevent contamination of said at least one of said laser source and said external cavity.

2. (Currently Amended) The apparatus of claim 1, further comprising a moisture trap to absorb moisture within said hermetically sealable container and wherein said heat source is further to maintain said at least one of said gain medium and said external cavity at said first temperature above a third temperature of said moisture trap when said gain medium is not powered to prevent condensation on said at least one of said gain medium and said external cavity.~~wherein said inert atmosphere is moisture controlled.~~

3. (Original) The apparatus of claim 1, wherein said external cavity is tunable.

4. (Previously Presented) The apparatus of claim 3, wherein said laser source comprises a gain medium having first and second output facets, said second output facet having an anti-reflective coating thereon.

5. (Previously Presented) The apparatus of claim 4, wherein said external cavity laser further comprises an end mirror, said end mirror and said first output facet of said gain medium defining said external cavity, said gain medium to emit a beam from said second output facet along an output path.

6. (Previously Presented) The apparatus of claim 5, further comprising a tuning assembly operatively coupled to said end mirror and configured to adjust said end mirror, in said hermetically sealable container.

7. (Previously Presented) The apparatus of claim 3, wherein said external cavity laser further comprises a grid generator.

8. (Previously Presented) The apparatus of claim 1, wherein said external cavity laser further comprises a channel selector.

9. (Previously Presented) The apparatus of claim 8, further comprising a tuning assembly operatively coupled to said channel selector and configured to adjust said channel selector.

10. (Previously Presented) The apparatus of claim 1 wherein the activated carbon drain comprises a surface of carbon to absorb outgassing compounds that occur during operation of the laser source, the outgassing compounds including volatile organic compounds.

11. (Original) The apparatus of claim 1, further comprising a moisture trap positioned within said hermetically sealable container.

12. (Previously Presented) The apparatus of claim 1, wherein said inert atmosphere comprises a gas selected from nitrogen, helium, neon, argon, krypton,

xenon, a nitrogen-helium mix, a neon-helium mix, a krypton-helium mix, or a xenon-helium mix.

13. (Previously Presented) The apparatus of claim 3, further comprising an optical fiber extending into said hermetically sealable container and positioned to receive optical output from said external cavity laser, and a fiber feedthrough, configured to hermetically seal said optical fiber.

14. (Currently Amended) A laser apparatus, comprising:

(a) a gain medium including an active region and having first and second output facets~~, said second output facet having an anti-reflective coating thereon~~;

(b) an end mirror, said first output facet of said gain medium and said end mirror defining an external cavity, said active region of said gain medium to emit a beam along an optical path in said external cavity, said end mirror positioned in said optical path;

(c) a hermetically sealed container enclosing said external cavity within an inert atmosphere;

(d) a moisture trap positioned within said hermetically sealed container to absorb moisture within said hermetically sealed container; and

(e) a heat source thermally coupled to at least one of said gain medium and said end mirror to maintain said at least one of said gain medium and said end mirror at a first temperature above a second temperature of said moisture trap when said gain medium is not powered to prevent condensation on said at least one of said gain medium and said end mirror.

15. (Original) The apparatus of claim 14, further comprising a tuning assembly operatively coupled to said end mirror and configured to adjust said end mirror, said tuning assembly located within said hermetically sealed container.

16. (Original) The apparatus of claim 14, wherein said external cavity laser further comprises a grid generator, said grid generator positioned in said optical path in said external cavity.

17. (Original) The apparatus of claim 14, further comprising a channel selector, said channel selector positioned in said optical path in said external cavity.

18. (Original) The apparatus of claim 17, further comprising a tuning assembly operatively coupled to said channel selector and configured to adjust said channel selector, said tuning assembly positioned within said hermetically sealed container.

19. (Original) The apparatus of claim 14, further comprising an activated carbon drain positioned within said hermetically sealed container.

20. (Cancelled)

21. (Original) The apparatus of claim 14, wherein said inert atmosphere is a gas selected from nitrogen, helium, neon, argon, krypton, xenon, a nitrogen-helium mix, a krypton-helium mix, or a xenon-helium mix.

22. – 32. (Cancelled)

33. (Currently Amended) A laser apparatus, comprising:

(a) an external cavity laser having an external cavity and a laser source within the external cavity;

(b) means for hermetically sealing said external cavity laser in an inert atmosphere; [[and]]

(c) means for absorbing volatile organic compounds ~~an activated carbon drain positioned~~ within said hermetically sealable container ~~to absorb outgassing compounds~~[[.]]; and

(d) means for heating at least one of said laser source and said external cavity to a first temperature above a second temperature of said means for absorbing when said laser source is not powered to prevent contamination of said at least one of said laser source and said external cavity.

34. (Cancelled)

35. (Currently Amended) The apparatus of claim 33, further comprising means for trapping moisture from said inert atmosphere, and wherein said means for heating further comprises means for heat said at least one of said laser source and said external cavity to a first temperature above a third temperature of said means for trapping moisture when said laser source is not powered to prevent condensation on said at least one of said laser source and said external cavity..

36. (Original) The apparatus of claim 33, further comprising means for tuning said external cavity laser.

37. (Original) The apparatus of claim 33, further comprising means for tuning said external cavity laser.

38. (Currently Amended) The laser apparatus of claim 1, further comprising a sacrificial surface within said means for hermetically sealing~~hermetically sealable container~~, said sacrificial surface to be maintained at a temperature less than surrounding surfaces.

39. (New) A method, comprising:

generating an optical beam along an optical path with a laser source;

feeding back at least a portion of the optical beam having a selected wavelength to the laser source;

selecting the selected wavelength with optical elements of an external cavity, the laser source and external cavity enclosed in an inert atmosphere using a hermetically sealed container;

absorbing moisture within the hermetically sealed container with a moisture trap; and

heating at least one of the laser source and the optical elements to a first temperature above a second temperature of the moisture trap when the laser source is not powered to prevent condensation on the at least one of the laser source and the optical elements.

40. (New) The method of claim 39, wherein the external cavity is defined by an end mirror and a facet on the laser source, the end mirror and the facet positioned in the optical path.

41. (New) The method of claim 40, wherein the optical elements include at least one of the end mirror, a grid generator, and a channel selector positioned in the optical path.

42. (New) The method of claim 39, further comprising:

absorbing outgassing compounds created within the hermatically sealed container with an activated carbon drain; and

heating the at least one of the laser source and the optical elements to a first temperature above a third temperature of the activated carbon drain when the laser source is not powered to prevent contamination of the at least one of the laser source and the optical elements.

43. (New) The method of claim 42, wherein absorbing outgassing compounds comprises absorbing volatile organic compounds with the activated carbon drain positioned within the hermetically sealed container.

44. (New) The method of claim 39, wherein the inert atmosphere comprises a gas selected form nitrogen, helium, neon, argon, krypton, xenon, a nitrogen-helium mix, a neon-helium mix, a krypton-helium mix, or a xenon-helium mix.

45. (New) The method of claim 39, further comprising directing the optical beam out of the hermetically sealed container with an optical fiber extending into the hermetically sealed container and positioned to receive the optical beam from the external cavity, the optical fiber being hermetically sealed with a fiber feedthrough.